Serial No.: 09/733,179

Filed: December 7, 2000

Page : 2 of 15

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

- 1-18. (Cancelled)
- 19. (Original) An antibody that specifically binds Hsp70B'.
- 20. (Original) The antibody of claim 19, wherein the antibody is a monoclonal antibody.
- 21. (Original) The antibody of claim 19, wherein the antibody has a relative titre index greater than one.
- 22. (Currently Amended) An antibody that specifically binds an Hsp70B' peptide consisting of five or more consecutive amino acid residues within one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);
RDKIPEEDRRKMQDKC (SEQ ID NO:4) (SEQ ID NO:4);
AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6); or
MQAPRELAVGID (SEQ ID NO:9).

- 23. (Original) The antibody of claim 22, wherein the antibody is a monoclonal antibody.
- 24. (Currently Amended) An antibody that specifically binds a peptide that consists of one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);
RDKIPEEDRRKMQDKC (SEQ ID NO:4) (SEQ ID NO:4);
AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6); of

Serial No.: 09/733,179 Filed: December 7, 2000

Page : 3 of 15

MQAPRELAVGID (SEQ ID NO:9): (SEQ ID NO:9);

AHVFHVKGSLQEES (SEQ ID NO:7);

CGTQARQGDPSTGPI (SEQ ID NO:2);

CGTQARQGDPST (SEQ ID NO:3);

RDKIPEEDRRKMQ (SEQ ID NO:5); and or

GSLQEESLRDKIPEE (SEQ ID NO:10).

25. (Original) The antibody of claim 24, wherein the antibody is a monoclonal antibody.

26. (Currently Amended) A kit for analyzing the expression of Hsp70B', the kit comprising an antibody that specifically binds an Hsp70B' peptide consisting of five or more consecutive amino acid residues within one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);

RDKIPEEDRRKMQDKC (SEQ ID NO:4);

AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6); or

MQAPRELAVGID (SEQ ID NO:9).

- 27. (Original) The kit of claim 26, further comprising an Hsp70B' protein or an Hsp70B' peptide.
- 28. (Currently Amended) A method of obtaining an antibody that specifically binds Hsp70B', the method comprising administering to an animal a peptide consisting of five or more consecutive amino acid residues within one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);

RDKIPEEDRRKMQDKC (SEQ ID NO:4); (SEQ ID NO:4);

AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6); or

MQAPRELAVGID (SEQ ID NO:8).

Serial No.: 09/733,179 Filed: December 7, 2000

Page : 4 of 15

29. (Currently Amended) The method of claim 28, wherein the peptide consists of one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);

RDKIPEEDRRKMQDKC (SEQ ID NO:4) (SEQ ID NO:4);

AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6); OF MQAPRELAVGID (SEQ ID NO:8);

AHVFHVKGSLQEES (SEQ ID NO:7);

CGTQARQGDPSTGPI (SEQ ID NO:2);

CGTQARQGDPST (SEQ ID NO:3);

RDKIPEEDRRKMQ (SEQ ID NO:5); and or

GSLQEESLRDKIPEE (SEQ ID NO:10).

- 30. (Original) The method of claim 29, wherein the peptide further comprises a carrier that enhances the immunogenicity of the peptide and, optionally, a linker between the peptide and the carrier.
 - 31. (Original) The method of claim 28, wherein the antibody is a monoclonal antibody.
- 32. (Currently amended) A method of determining whether a cell has been exposed to a stressful environment or a stressful substance, the method comprising performing an immunoassay in which proteins in or on the cell or proteins extracted from the cell are exposed to an antibody that specifically binds Hsp70B', wherein a specific interaction between a protein in or on the cell or a protein extracted from the cell and the antibody indicates that the cell has been exposed to a stressful environment or a stressful substance.

33-34. (Cancelled).

35. (Original) The kit of claim 26, wherein the antibody is a monoclonal antibody.

Serial No.: 09/733,179

Filed: December 7, 2000

Page : 5 of 15

36. (New) The kit of claim 26, further comprising instructions for use.

- 37. (New) The kit of claim 27, further comprising instructions for use.
- 38. (New) The kit of claim 27, wherein the antibody is a monoclonal antibody.
- 39. (New) The kit of claim 36, wherein the antibody is a monoclonal antibody.
- 40. (New) The kit of claim 37, wherein the antibody is a monoclonal antibody.
- 41. (New) The method of claim 28, wherein the peptide further comprises a carrier that enhances the immunogenicity of the peptide and, optionally, a linker between the peptide and the carrier.
 - 42. (New) The method of claim 30, wherein the carrier is KLH.
 - 43. (New) The method of claim 41, wherein the carrier is KLH.
 - 44. (New) The method of claim 29, wherein the antibody is a monoclonal antibody.
 - 45. (New) The method of claim 30, wherein the antibody is a monoclonal antibody.
 - 46. (New) The method of claim 41, wherein the antibody is a monoclonal antibody.
 - 47. (New) The method of claim 42, wherein the antibody is a monoclonal antibody.
 - 48. (New) The method of claim 43, wherein the antibody is a monoclonal antibody.

Serial No.: 09/733,179 Filed: December 7, 2000

Page : 6 of 15

49. (New) The method of claim 32, wherein the antibody is a monoclonal antibody.

- 50. (New) The method of claim 32, wherein the antibody has a relative titre index greater than one.
- 51. (New) The method of claim 32, wherein the antibody specifically binds an Hsp70B' peptide consisting of five or more consecutive amino acid residues within one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);

RDKIPEEDRRKMQDKC (SEQ ID NO:4);

AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6); or

MQAPRELAVGID (SEQ ID NO:9).

- 52. (New) The method of claim 51, wherein the antibody is a monoclonal antibody.
- 53. (New) The method of claim 32, wherein the antibody specifically binds a peptide that consists of one of the following amino acid sequences:

VPGGSSCGTQARQGDPSTGPI (SEQ ID NO:1);

RDKIPEEDRRKMQDKC (SEQ ID NO:4);

AHVFHVKGSLQEESLRDKIPEEDRRKMQ (SEQ ID NO:6);

MQAPRELAVGID (SEQ ID NO:9);

AHVFHVKGSLQEES (SEQ ID NO:7);

CGTQARQGDPSTGPI (SEQ ID NO:2);

CGTQARQGDPST (SEQ ID NO:3);

RDKIPEEDRRKMQ (SEQ ID NO:5); or

GSLQEESLRDKIPEE (SEQ ID NO:10).

Applicant: Heather A. Boux et al. Serial No.: 09/733,179 Attorney's Docket No.: 12071-006001

: December 7, 2000 Filed

: 7 of 15 Page

54. (New) The method of claim 53, wherein the antibody is a monoclonal antibody.